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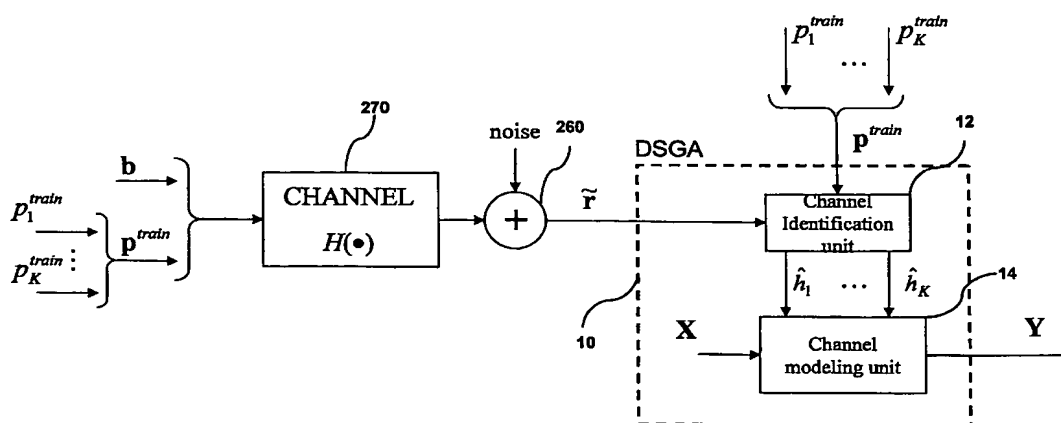
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(54) Title: MIXED DIRECT-INDIRECT ADAPTATION PROCEDURE APPLIED TO RECEIVER FILTER



(57) Abstract: An adaptive procedure that optimizes the parameters of a receiver filter such as a Multiuser Detection (MUD) applied to Direct-Sequence Code Division Multiple Access (DS-CDMA) is disclosed. This procedure takes into account the constraints imposed by the absence of training data sequences sent by the transmitter and required to adapt the filter parameters at the receiver. The adaptation consists in using two distinct data sequences transmitted through the same channel; one data sequence is transmitted as payload data and a second data sequence is transmitted as training data used to adapt the filter parameters at the receiver. Parameters of the receiver filter are adapted in presence of varying channels at the same time as the data information sequences are transmitted. The adaptation is realized following a mixed adaptation procedure based on a direct (without channel identification) and indirect (with channel identification) scheme. The invention is described for UMTS (Universal Mobile Telecommunications System) application in cellular communications system.